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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,427	03/28/2005	Tsutomu Miyauchi	112857-414	5259
29175 7590 01/10/2007 BELL, BOYD & LLOYD, LLP P. O. BOX 1135 CHICAGO, IL 60690			EXAMINER NGUYEN, THAN VINH	
			ART UNIT 2187	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/10/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/520,427	Applicant(s) MIYAUCHI, TSUTOMU	
	Examiner Than Nguyen	Art Unit 2187	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>1/4/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 16-30 are pending.
2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
3. The IDS, filed 1/4/05, has been considered.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 16-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
6. As to claim 16, Applicant claims a cache device for storing data. However, there are no elements in the body of the claim for storing data.
7. As to claim 16, (line 5) Applicant claims a cache group table. Is this data or an actual physical element? If it is just data, then it is not given weight since Applicant is claiming a device, not data. If it is a physical element, applicant must indicate what physical element correspond to this limitation.
8. As to claim 16, (line 6) it is unclear as to what is being claimed. In the preamble, Applicant claims a cache device and describes the cache device in the body of the claim. However, in the body (line 6), Applicant is referring to "the cache device", of which Applicant is trying to define, and "other cache devices", which have not been defined. The scope of the invention cannot be realized since the invention, a "cache device", is referring back to itself, in

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the body of the claim, in its definition. In other words, a claimed device A cannot comprise a device A (or itself). Claim language modification to clarify the invention is required. Applicant must also define "other cache devices".

9. As to claim 16, 23,30 what is "collaborative content control being carried out for the cache group" and how is it related to the cache group table. As presently written, "a cache group table collaborative content control being carried out for the cache group" does not make any sense.

10. As to claim 16, 23, 30 what does "out of data blocks including in content based on the information included in the cache group table" mean?

11. As to claim 16, 23,30 the phrase "for controlling the data blocks in the deletion pending status" is vague. The term "controlling" is vague and ambiguous. One of ordinary skill would not be able to know what is being done to control the data blocks. This limitation must be clarified.

12. The claim (16 and 23), as written is incoherent, vague, grammatically incorrect, run-on, and lacking a clear indication of what is being claimed. The purpose of the controller is vague and incomprehensible, as written. Applicant must clarify the claim language to describe the invention in a clearer and more coherent manner.

13. As to claim 17,22,24,29, Applicant claims "the controller carries out a process". This language is vague and ambiguous. What is this process? Is the process the listed mathematical calculation? If so, Applicant must clearly state this fact. Applicant should note that mere mathematical calculation, as listed in claim 17, without a practical application of the calculated result, is nonstatutory subject matter. It should be noted that, in the listed calculation, the

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variable “m” was not defined. Therefore the calculation cannot be realized or comprehended by one of ordinary skills without knowing what all of the variables represent.

14. Claim 18,25 recites the limitation "the collaborative control" in line 3. There is insufficient antecedent basis for this limitation in the claim.

15. As to claim 19 (line 5), 26 (line 4) what is “out of the data blocks”? This language is vague and incomprehensible.

16. As to claim 19 (line 6), 26 (line 8) what does “the controller controls the data blocks, other than the data blocks in the deletion pending status” mean? Does Applicant mean the controller controls data blocks that are not in the deletion pending status? Clarification is required.

17. As to claim 20 (line 1), 27 (line 2), Applicant claims “the deletion pending list comprises a plurality of deletion pending lists”? How can a single deletion pending list be a **plurality** of deletion pending lists?

18. As to claim 20 (line 4), 27 the language “and registers an entry corresponding to each of the data blocks in one list selected from the deletion pending lists according to the judgment” is not comprehensible. Clarification is requested.

19. Claim 20,27 recites the limitation "the judgment" in line 6. There is insufficient antecedent basis for this limitation in the claim.

20. As to claim 16,23,30 Applicant claims a method/device for “storing data ... and retrieving the cached data ... to send the cached data to the terminal”. However, the cited method did not include any step to store data, retrieve cached data, nor send the cached data to

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the terminal. Thus the claimed invention is incomplete, as none of the purpose listed in the preamble has been satisfied by the claim body.

21. Claims 17-22,24-29 are also rejected as being dependent upon a rejected parent claim, incorporating its deficiencies.

Claim Rejections - 35 USC § 101

22. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

23. Claim 30 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. A computer program, per se, is not one of the statutory patenting subject matter (See MPEP 2106.01). It is not a product of manufacture, process, machine, nor composition of matter. A computer program does not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. See Lowry, 32 F. 3d at 1583-84, USPQ2d at 1035.

Allowable Subject Matter

24. The claims have allowable subject matter. However, Applicant must modify the claims language to clarify the claims, as addressed above.

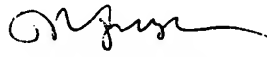
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Than Nguyen whose telephone number is 571-272-4198. The examiner can normally be reached on 8am-3pm M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Sparks can be reached on (571) 272-4201. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Than Nguyen
Primary Examiner
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